

Prevalence burn injuries and risk factors in persons older the 15 years in Urmia burn center in Iran

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Received: 27 March 2011

Revised: 30 May 2011

Accepted: 13 June 2011

Abstract

Background: Burn injuries in many respects is the most tragic that a person may experience. The purpose of this study was to know the burn casualties prevalence in people over 15 years old to identify the risk and predisposing factors in the province of west Azarbaijan of Iran.

Methods: This cross-sectional study was performed from March 2008 to March 2010. The demographic and epidemiologic information about burn and its complications were extracted from the data banks and records. Data were collected and analyzed.

Results: Four hundred twenty eight patients (44.9% female and 56.1% male) were studied. Most of the admissions were in 16 to 25 years age bracket. Burning with fire accounted (39.2%) of admission in males and (53.2%) in females which was the most common cause of burning. Percentage patients who had more than 40% body surface area (BSA) burned was 42.0% in males, and 30.1% in females. Patients with >40% BSA burn had a mortality of 73.8%. The mean body surface area burned was 33.8% in males and 25.2% in females. The mean duration of hospitalization was 6.19 days.

Conclusion: The results of this study show that the prevalence of burn injuries is relatively high with high mortality rate in those with BSA> 40%. The commonest cause of burn was fire.

Key words: Burn injuries, Prevalence, Risk Factors.

Caspian J Intern Med 2011; 2 (2):240-244.

Statistics say that burn injuries are a worldwide problem that ranks high among the injuries suffered by man consisting of these three problems: ignorance, poverty and diseases that have many complications (1). It is also mentioned that burn injuries are among the most devastating of all injuries and a major global public health crisis and are the fourth most common type of trauma worldwide, following traffic accidents, falls, and interpersonal violence (2, 3).

The province of West Azerbaijan has a cold climate, because of its location in the north altitude in Iran. It must be said that there is only one Burn Center which is located in Imam Khomeini Hospital in Urmia the capital center of the province where important burn cases are referred to from all cities in this region. This research was designed to study epidemiological parameters over one year to help in devising the strategies towards burn prevention and the cost effective management in developing regions like West Azerbaijan province in Iran. In our study, burn admission over a two year period was analyzed in Imam Khomeini Hospital in Urmia (capital of the Azarbaijan province) as a Burn Care Center catering for a large population from all cities of the province. In our study the characteristics of high- risk persons, together with risk factors in the environment were identified to provide a basis for planning effective prevention. Such information is therefore essential to design preventive programs for our region.